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U.S. DEPARTMENT OF AGRICULTURE
AND STATE AGRICULTURAL COLLEGES
COOPERATING



STATES RELATIONS SERVICE
OFFICE OF EXTENSION WORK NORTH AND WEST
WASHINGTON, D. C.

## THIS LOOKS GOOD

SEED INJURY DEMONSTRATIONS IN WHATCOM COUNTY, WASHINGTON

Many county agents have felt that more or less injury occurs when seeds are dipped with such solutions as formaldehyde in smut control work. In some cases germination is so weakened as to offset the value of the treatment. In some parts of the country these results have tended to discredit the whole subject of seed treatment.

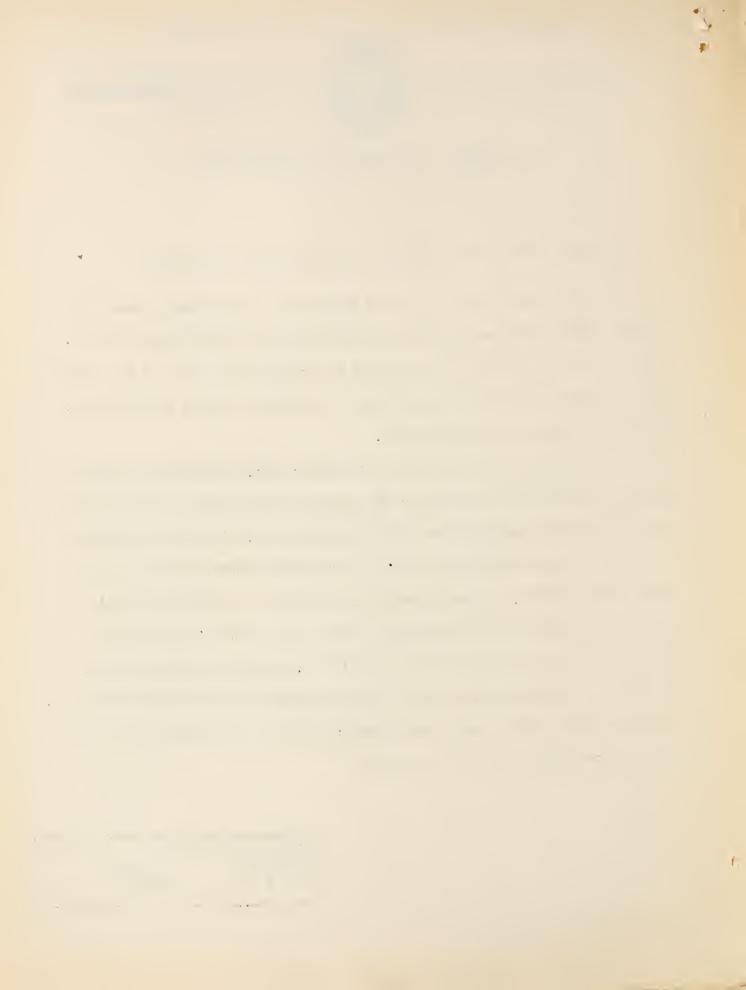
County Agent H. B. Carroll in Whatcom County, Washington, this year arranged a series of demonstrations to show specifically that this treatment could be used with safety if the seeds were dipped in limewater immediately following the formaldehyde treatment. Demonstrations were conducted on ten farms under definite greenhouse control conditions, as well as observation demonstrations under field conditions. The results of this demonstration work is so apparent and so convincing that Mr. Carroll has distributed the results in a follow-up campaign by means of illustrations and tabular matter. Below is given a table showing the results of these demonstrations which has been sent to every farmer in his county:

County Agent Section

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SEED INJUPY DEMONSTRATIONS, WHATCOM COUNTY, WASHINGTON, 1921

Greenhouse Germination Tests - Oats, Barley and Wheat.

*	S.E. McCaw	S.E.McCaw	son Feter-		100	S.E.NcCaw	J.S.Johnson	Jacknan Bros.	Geo.Knittle	™.L. <sup>w</sup> ilder	Name of Cooperator
	Rome	Rone	Clipper	woodlyn	(	Rowe	ACLE	. Delta	Greenwood	Pleasant Valley	Community
1	Wheat	Haendshen Barley	Swedish Select	White Boninzi		Shield Oats	Swedish Select	20th century	Swedish Select Oats	Swedish Select Oats	Variety
	98.5	78	74	84.5	ŷ5	Τὸ	94,5	βô	83	88	Per cent germina- tion un- treated seed
	54.5	66	71	80.5	74.5	74	91,5	<b>[</b> 8	78	77,5	Per cent germina- tion for- maldehyde treatment
	35	12	ω	4	20,5	17	ယ	17	رب د	10.5	Percent loss due to formal- dehyde
	100	84,5	71	88	°4	100	96	<u>04</u> ,5	76.5	97.5	Per cent germination formalde- hyde and line water
	45.5	18.5	0	7,5	20	26	4,5	13,5	0	20	Per cent gain by use of lime water
the value of linewater	Field showed clearly	Field results clear- more yigorous plants and roots,	Although no difference in greenhouse tests, the experiment was clearly defined in the field.	Field not inspected, tags lost and grain not planted.	Oats treated April 8, not seeded till Apr.16. Field results most noticeable, also root appearance.	Field results very	Field results not clearly defined, but difference in root system plain.	Results very no- ticeable in field		Results very	n Fenarks

